# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of

REQUESTS BY SKYBRIDGE SPECTRUM FOUNDATION AND TELESAURUS HOLDINGS GB, LLC FOR WAIVER AND EXTENSION OF TIME TO CONSTRUCT 900 MHZ MULTILATERATION LOCATION AND MONITORING SERVICE LICENSES WT Docket No. 12-229

#### Via the ECFS

### **COMMENTS OF IEEE 802**

- 1. IEEE 802<sup>1</sup> respectfully submits its Comments in the above-captioned Proceeding<sup>2</sup>.
- 2. IEEE 802, as a leading consensus-based industry standards body, produces standards for wireless networking devices, including wireless local area networks ("WLANs"), wireless personal area networks ("WPANs"), wireless metropolitan area networks ("Wireless MANs"), and wireless regional area networks ("WRANS"). Included in our standards development activity is an emphasis on coexistence, which is the focus of our Wireless Coexistence working group. We appreciate the opportunity to provide these comments to the FCC.

#### **INTRODUCTION**

.

- 3. Since IEEE 802 has previously submitted comments related to LMS construction requirements, most recently in the matter of Requests by Progeny LMS, LLC, et al, WT Docket No. 12-202, we believe our comments related to this proceeding will be useful to the Commission in resolving the issues at hand.
- 4. We have a particular interest in the 902-928 MHz band, since the IEEE 802.11 Working

<sup>&</sup>lt;sup>1</sup> The IEEE Local and Metropolitan Area Networks Standards Committee ("IEEE 802" or the "LMSC").

<sup>&</sup>lt;sup>2</sup> This document represents the views of IEEE 802. It does not necessarily represent the views of the IEEE as a whole or the IEEE Standards Association as a whole.

Group ("802.11") is developing an amendment to the base standard for sub-1 GHz operation of WLANs targeting this band, and the IEEE 802.15 Working Group ("802.15") has completed an amendment to the IEEE 802.15.4 base standard for WPANs specifically targeted at Smart Grid applications in this band.

## <u>IEEE 802 BELIEVES M-LMS IS NO LONGER VIABLE AS A GEOLOCATION</u> <u>TECHNOLOGY GIVEN THE PRESENT MARKET CONDITIONS</u>

- 5. IEEE 802 took the position that M-LMS technology is no longer viable considering current market conditions in its submission to WT 08-60 (submitted by the IEEE 802.18 Radio Regulatory Technical Advisory Group), and WT 12-202, and IEEE 802 continues to support this view.
- 6. We continue to see no evidence that M-LMS services are viable technology offerings given the products currently available in the market place using low cost Global Positioning System ("GPS") alternatives for geolocation services in outdoor applications.
- 7. GPS location services have served the public interest in ways unimagined by the initial creators of the GPS technology. GPS services completely dominate the present geolocation market, especially in outdoor applications.
- 8. Indoor location services are currently available that use cellular mobile, Wi-Fi<sup>TM</sup> or ZigBee technology to improve performance in indoor environments, where GPS isn't always effective. These approaches use systems and infrastructure that is already widely available. Large scale deployment of Wi-Fi<sup>TM</sup>, ZigBee and cellular mobile equipment have already resulted in cost effective, widely deployed location-based services, and future development of application software is likely to improve present performance over time for indoor environments.
- 9. It is difficult for us to conceive of an M-LMS service using proprietary technology within a specialized spectrum allocation that could compete with services already available using presently available technology in licensed and unlicensed spectrum, or which could be economically created to address future needs in competition with low cost extensions of existing infrastructure and technologies.

### <u>IEEE 802 BELIEVES THAT UNLICENSED USE OF THE 902-928 MHZ BAND IS THE</u> BETTER REGULATORY MODEL FOR THIS SPECTRUM ALLOCATION

- 10. IEEE 802 has been and continues to be a major, and successful, player as a standards development organization in creating technology that makes use of unlicensed spectrum. Our standards underpin widely available and cost effective networking equipment operating in the 902-928 MHz band, as well as the 2.4 GHz band, and the 5 GHz unlicensed bands.
- 11. We have seen the 902-928 MHz spectrum become a valuable resource for open coexistence between different systems supporting different needs as an unlicensed band.
- 12. Unlicensed spectrum has economic value not because it is a commodity to be bought and sold, but because it is adaptable to product and technology innovation allowing new services to be implemented quickly in rapidly changing market environments.
- 13. The issue with M-LMS licenses as they presently exist is not that there is no technology available to implement the service, but that there is no market for new standalone location based systems.
- 14. The counterexample to single-use spectrum assignments like M-LMS is the rollout of automated meter reading networks by the US gas and electric industry under the Commission's Part 15 rules for unlicensed operation in the 902-928 MHz band, a substantial infrastructure investment in an innovative application made possible by the flexibility of unlicensed spectrum.

### **CONCLUSION**

15. IEEE 802 encourages the Commission reject these requests by Skybridge, et al, for an extension of the construction deadlines. The applicants requesting waivers in the subject proceeding have had more than enough time to show progress in creating appropriate infrastructure to support M-LMS services, and further delay does not, in our opinion, serve the public interest.

### Respectfully submitted,

/s/

Michael Lynch Chair, IEEE 802.18 Radio Regulatory Technical Advisory Group 108 Brentwood Court Allen, TX 75013 972.814.4901 freqmgr@ieee.org